

Disposition of Your Earthen Vessel: Available Options (Part 1)

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When you die, it may be the end of your journey through this world, but your body is left behind. This “earthen vessel,” like a clay pot, is subject to decay. As a result, disposition of your body becomes an urgent matter.

The following body disposition options are available in Washington state: burial, cremation, terramation, and alkaline hydrolysis. A fifth option, full body donation, uses one of the first four methods after the body has been used for its intended purposes. Full body donation will be discussed in a future “Death Matters” column.

Burial

Burial refers to the placement of a body in the ground or a crypt and marking the location with a memorial (e.g., monument, headstone or plaque). Burial is an ancient means of body disposition with the oldest known grave dating back almost 80,000 years.

Because you cannot be buried on private property in Washington, a burial requires a cemetery plot or crypt. Most cemeteries require the body to be placed in a casket; some also require an outer burial container (vault or grave lining) to keep the grave from collapsing. Embalming, with a few exceptions, is not required by law; it is recommended if public viewing is desired more than a couple of days after death.

A burial is typically the most expensive means of body disposition due to the cost of the casket, vault, and burial plot. The environmental impact depends on whether the body is embalmed, type of casket, and need for a grave lining. “Green burials” which use only non-toxic chemicals, biodegradable burial containers, and no grave lining minimize the environmental impact of a burial but are not available everywhere.

Cremation

Cremation is the process of reducing a body to bone and ash by burning. It has been practiced since prehistoric times, especially among certain cultures and religions, and in times of war. Cremation is currently the most popular form of body disposition in Washington.

Before a body is cremated, pacemakers and other medical devices are removed because they can explode and/or produce toxins. The body is then placed in a burnable container ranging from a corrugated cardboard box to a wooden casket and heated to 1,600 to 2,100 degrees in an industrial furnace that is large enough to hold one body.

The process takes two to three hours on average. The remains, primarily bone fragments, are passed through a magnetic field to remove metal. The bone is reduced to a coarse powder and returned to the next-of-kin.

Cremation is usually the cheapest means of body disposition and often characterized as more environmentally friendly than burial because it does not use embalming chemicals, nor require a casket or the use of land. It consumes, however, a significant amount of natural gas and electricity and produces greenhouse gases and toxic emissions.

Terramation

Terramation (also known as natural organic reduction, human composting, or body composting) is the process of transforming human remains into soil. Washington was the first state in the nation to legalize the process.

Terramation is undertaken in a single-body vessel and uses naturally occurring microbes, organic materials (such as alfalfa, sawdust, and woodchips), heat, and moisture to accelerate decomposition of soft tissues. Heat generated by the process kills most harmful microbes.

Bone, implants, and pacemakers are minimally affected by the process. The bone is reduced to a coarse powder and reintroduced into the soil. Implants and pacemakers are recycled or discarded.

Terramation takes 6 to 10 weeks and results in 0.5 to 1.5 cubic yards of soil. All or a portion of the soil is returned to the next-of-kin or, depending on the company, donated to a land conservation site.

Terramation is typically cheaper than burial but costs more than aquamation and cremation. It is carbon neutral, produces no toxic emissions, and uses less energy than other means of body disposition. Because only three facilities in Washington (two in Auburn and one in Seattle) perform terramation, local funeral homes must work with these facilities to provide terramation. As a result, the cost and impact on the environment will be higher than quoted due to the necessary transport of the body and resulting soil.

Aquamation

Aquamation (also known as alkaline hydrolysis) is a process that reduces a body to sterile liquid and bone using water, heat, and alkali. The process has been used to dispose of animal carcasses for over a century but was first legalized for the disposition of human remains in 2003. The process was legalized in Washington in 2020.

Aquamation is undertaken in a single-body vessel that is placed under pressure to prevent boiling. Soft tissues are quickly reduced to simple molecules such as amino acids, sugars, fatty acids, and water. Bone, implants, and pacemakers are minimally affected by the process. The bone is reduced to a coarse powder and returned to the next-of-kin. Implants and pacemakers are recycled or discarded.

Aquamation is generally cheaper than burial and terramation but more expensive than cremation. It takes about 6-8 hours and uses over 300 gallons of water. It is carbon neutral, produces no toxic emissions, and uses less energy than cremation. Because only two facilities in Washington (one in Kent and one in Seattle) currently perform aquamation, local funeral homes must work with these facilities to provide aquamation. As a result, the cost and impact on the environment will be higher than quoted due to the necessary transport of the body.

How do you decide which means of body disposition is right for you or a loved one? Next month we will discuss the factors most likely to affect your choice.

Jeanette Stehr-Green volunteers at Volunteer Hospice of Clallam County along with a host of other community members who provide respite care, grief and bereavement support, and access to free medical equipment.